

Tom McCarron

From: Robert Schulz <rschulz@sdsu.edu>
Sent: Wednesday, March 6, 2019 5:59 PM
To: Tom McCarron
Cc: Agnes Wong Nickerson
Subject: PSFA Update
Attachments: PSFA Report to Tom.rev2.docx; Untitled attachment 05458.html

Unfortunately longer, not shorter, but it now addresses the communications issue.

Bob

Tom

The current work in PSFA started with feasibility study/assessment of the PSFA Building in 2017.

The highest priority items of the identified scope were the addition of exhaust and isolation of return air from areas where chemicals are used or stored: teaching labs, research labs, chemical storage rooms and custodial rooms. Because these spaces are located throughout the building on all four levels, shafts for the new exhaust ducts were installed from these rooms up to the roof, where the new exhaust fans would be installed.

This was originally planned to be a summer construction project, but the State Fire Marshal permits took much longer than our now conservative time frames for approval. That then pushed this work into our Christmas break, and was scheduled to happen before Spring semester began in January.

When the contractor cut into the existing concrete roof deck for the ductwork penetrations in early January, they were dealing with a very old roof in poor repair. Because of the age of the roofing system, the best practice roof patch method recommended by the design team for this project was unsuccessful. The materials specified for the patch were not able to produce a sufficient seal with the adjacent, aging roofing, and these new penetrations allowed leaks into the building during a rain event. As the rains continued, additional moisture breached the roofing materials, causing continuous leaks even after the rains had stopped. The interior walls affected by these leaks were dried out and replaced; however, it was clear that another roofing method would be required to in order to properly seal the roof and prevent future water intrusion.

Unfortunately, this new method required a much more odorous product to be used to seal the new roof penetrations. We quickly realized that this product has had significant off-gassing that occurs during unpredictable hours & conditions. Because the outside air intakes for PSFA are located on the roof, the off-gassing odors have been carried throughout the building. We placed filters on all intakes, but were unsuccessful at stopping the odor from getting in the building.

With the condition of the buildings HCAC system once the smell got in, it was also difficult to get out. We probably tried 20+ mitigation measures, and all more-or-less were failures to control the odor. We have mobilized additional staff from within PD&C, our external CM firms, Facilities Services, and have still been unsuccessful in removing with these odors.

We had EHS come & test the toxicity of the fumes, and they did not detect anything toxic. However, the smell is clearly present, and it comes and goes with changing weather patterns & off-gassing cycles.

Over time, the occupants have become more sensitive and legitimately upset. It was decided early on, after the leaks, that in order to make the environment better for the occupants, construction work would only happen at night or on weekends. Unfortunately, due to OSHA regulations, this type of roof work was not allowed to happen at night, only on weekends. And, unfortunately, the 5 of the last 6 weekends have been raining, so the roof work could not be completed.

Due to ongoing complaints, effects of the odors on the occupants, and the lack of successful mitigation efforts, we elected to move out any PSFA occupants, on a voluntary basis, to temporary office space in the Adams Humanities Building earlier this week (March 4th). Some faculty and staff were able to work remotely and did not require relocation; however, about (35) occupants from the College of PSFA were moved. They will remain in Adams Humanities until it is determined that the odors have been eradicated from the building.

An environmental consultant, Millennium Consulting, has been contracted to assess the indoor air quality within PSFA, and they will perform air monitoring during upcoming roof work. Millennium's indoor air assessment will be helpful in determining at what point the building occupants can move back into their office spaces.

Construction is now almost complete. The General Contractor only needs 2 weekend days with no rain to complete the work. However, with the continuous off-gassing issue, I think we'll need to monitor the odors to be sure the smells are gone until we move anyone back in.

We now realize that communication with the building owners, College of PSFA, was certainly insufficient up until the first complaints were received by building occupants in early January 2019. Since then we communicated frequently with the occupants of the spaces where invasive and disruptive work was set to occur, which of course did not include all the spaces impacted by the resulting odors. A very general scope of work was provided to the College of PSFA Dean's office early on in the project (November 2017), and follow up on project schedule and details, much to our regret, never occurred. We agree that this is unacceptable.

Since this misstep has been brought to our attention, several weekly update emails have been sent out to the College of PSFA and other building occupants. Separate weekly meetings have been established with the College of PSFA Associate Dean and ENS occupants to review upcoming scope and schedule, whether the work directly impacts these colleges or is simply informational. The PSFA Dean's office has led the effort in sending out these updates to College of PSFA personnel, as well as Associate Deans for other colleges occupying the building. We hope our recent communication efforts have been more effective, and that the occupants' now know their concerns have been heard, and we will continue our attempts to improve communication in regards to this project.

In terms of lessons learned, one is that the time required for SFM approval is now exceeding our already lengthy estimates. Once we incurred that schedule impact, we should have deferred construction until this coming summer. Our thinking last fall was that such a delay would have put our funding at risk due fund expiration dates, and we believed we had a plan to complete the work before the start of spring classes. In hindsight, if we had any idea how bad the existing roof really was and how wet this winter would be, we wouldn't make that same decision. Additionally PD&C and the PSFA Refresh contractor have put together a list of lessons learned and we plan to implement better solutions on future projects. Perhaps most importantly, we will begin incorporating a project communications plan into all of our Major Capital Projects. As this project so clearly illustrated, even hundreds of emails does not qualify as a communications strategy.

Our academic colleagues feel strongly that nobody should have to live through a project like this. I will only say that I and all of our colleagues in BFA completely agree.

One other issue, aside from the odors, is the Fire Safety Correction Notice (EN11) that CASFM Deputy Jena Garcia issued in early January. During an early construction inspection, she noted countless existing non-code compliant conditions outside the area of our construction. These conditions included existing penetrations in fire rated walls, among many other violations. These were most likely "quick fixes" done by campus over many years, and were numerous throughout the entire building. Deputy Garcia issued an EN11 requiring all of these non-code compliant areas be fixed. These violations are numerous and widespread throughout the entire building, and many will be complicated to correct. We are in the process of coming up with a fix for these issues. These costs will exceed all available project contingencies.

Since the EN11 is actually unconnected to the project, the SFM has agreed to allow completion of the project, but we are still obligated as a University to make all those corrections. At this time we are preparing plan of action, estimates and a PBAC request for the necessary funds.